

WHAT IS CLAIMED IS:

- 1                   1.       A die having a cavity for use in a tool set including at least one  
2   punch, said die comprising:  
3                    an anvil having a surface which defines a bottom of the cavity;  
4                    a plurality of die segments; and  
5                    a die sleeve disposed circumferentially about the anvil surface and having a  
6   plurality of guideways which receive the die segments, wherein the die segments are  
7   inwardly spring biased and displaceable outwardly in response to movement of the punch.
- 1                   2.       A die according to Claim 1, wherein the said die is round and the  
2   guideways are formed by cutouts in the die sleeve.
- 1                   3.       A die according to Claim 1, comprising at least three die segments  
2   designed as ring sections.
- 1                   4.       A die according to Claim 1, wherein the die segments have side  
2   faces which extend along secant lines of the supporting surface.
- 1                   5.       A die according to Claim 1, wherein die segments are arranged on a  
2   supporting surface formed by a die base body having the anvil dispersed in its center.
- 1                   6.       A die according to Claim 5, wherein the die segments each have a  
2   radial dimension which is longer than a radial dimension of the supporting surface.
- 1                   7.       A die according to Claim 1, wherein all the die segments have the  
2   same shape.
- 1                   8.       A die according to Claim 1, wherein the die segments have a  
2   circular head piece.
- 1                   9.       A die according to Claim 8, further comprising annular spring  
2   element which circumferentially surrounds the die segments and provides spring biasing.
- 1                   10.      A die according to Claim 9, wherein the die segments each have a  
2   rear groove which disposes in the circumferential direction which receives the annular  
3   spring element.

1                    11.     A die according to Claim 10, wherein the annular spring element  
2 comprises an annular spring.

1                    12.     A die according to Claim 2, wherein the die sleeve has a  
2 predeterminable thickness relative to the anvil, this thickness forming a guide length for  
3 the die segment guideways.

1                    13.     A die according to Claim 1, wherein the anvil is cylindrical.

1                    14.     A die according to Claim 1, wherein the die sleeve has a hole for  
2 engagement of a spring-loaded pin for fastening the die to a die holder on a die holder.

1                    15.     A die according to Claim 1, wherein the die sleeve has a radial hole  
2 for engagement of a dog-point headless set screw on the die holder for fastening the die to  
3 a die holder.

1                    16.     A die according to Claim 1, wherein an electric pin projects on the  
2 base side on the die base body and can be inserted into a hole of a die holder and can be  
3 locked therein, wherein anti-rotation locking webs fix the die at the margin.